

What is claimed is:

1. A multi-fingered bipolar transistor formed on one semiconductor substrate, the bipolar transistor comprising groups of unit transistors that can be connected in parallel,
5 wherein the number of unit transistors is different from group to group and is defined as 2^n (n is a positive integer).
2. The bipolar transistor according to Claim 1,
 wherein the number of the groups is m , the groups being the
10 first group to the " m "th group, and the " i "th ($i=1\sim m$) group has 2^i pieces of the unit transistors.
3. The bipolar transistor according to Claim 2,
 wherein the " m " is 4.
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4. The bipolar transistor according to Claim 3,
 wherein the group further includes insulation films formed to
 cover the unit transistors,
 the bipolar transistor further comprising:
20 bonding pads formed on the insulation films; and
 lead wires through the insulation films that connect the group
 with the bonding pads.
5. The bipolar transistor according to Claim 4,
25 wherein the lead wires are selectively connected to the
 groups.
6. The bipolar transistor according to Claim 5 further
 comprising:
30 a collector electrode formed on a side opposite to the side of
 the semiconductor substrate on which the group is formed,
 wherein the lead wires connect emitters and bases of the

group with the bonding pads.

7. The bipolar transistor according to Claim 6 further comprising:

5 a group of transistors having one unit transistor.

8. The bipolar transistor according to Claim 5 further comprising:

10 a group of transistors having one unit transistor.

9. The bipolar transistor according to Claim 4 further comprising:

a collector electrode formed on a side opposite to the side of the semiconductor substrate on which the group is formed,
15 wherein the lead wires connect emitters and bases of the group with the bonding pads.

10. The bipolar transistor according to Claim 4 further comprising:

20 a group of transistors having one unit transistor.

11. The bipolar transistor according to Claim 3 further comprising:

25 a group of transistors having one unit transistor.

12. The bipolar transistor according to Claim 2,
wherein the group further includes insulation films formed to cover the unit transistors,

the bipolar transistor further comprising:
30 bonding pads formed on the insulation films; and
lead wires through the insulation films that connect the group with the bonding pads.

13. The bipolar transistor according to Claim 2 further comprising:

a group of transistors having one unit transistor.

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14. The bipolar transistor according to Claim 1 further comprising:

wherein the group further includes insulation films formed to cover the unit transistors,

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the bipolar transistor further comprising:

bonding pads that are formed on the insulation films; and

lead wires through the insulation films that connect the group with the bonding pads.

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15. The bipolar transistor according to Claim 1 further comprising:

a group of transistors having one unit transistor.